Attorney's Docket No.: 18201-003US1 / RCJ-A0213P-US

Applicant : Yasuno et al.
Serial No. : 10/529,713
Filed : March 31, 2006
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Amendments to the Specification:

Please insert into the specification the replacement Sequence Listing filed herewith.

Please replace the paragraph beginning at page 6, line 3 with the following amended paragraph:

The oligonucleotide fulfilling the above-mentioned conditions is sometimes referred to as a mutation probe in this invention. The repeat units constituting the promoter of the thymidylate synthase gene are not completely identical. The nucleotide sequence of each of the three repeat units composing a tandem repeat in the promoter region of the thymidylate synthase gene is shown below.

5'-ccgcgccacttggcctgcctccgtcccg ccgcgccacttcgcctgcctccgtcccg ccgcgccacttcgcctgcctccgtccccgcccg-3' (SEQ ID NO:5)

Therefore, an oligonucleotide that hybridizes to a specific repeat unit may not hybridize to other repeat units. The oligonucleotide of this invention was designed by utilizing such a phenomena. A preferable oligonucleotide of this invention is an oligonucleotide comprising the nucleotide sequence of SEQ ID NO: 1. A method for synthesizing an oligonucleotide having a nucleotide sequence of interest is known to those skilled in the art.

Please replace the paragraph beginning at page 15, line 25 with the following amended paragraph:

Fig. 1 shows the relationship between tandem repeats of 2R (SEQ ID NO:6) and 3R (SEQ ID NO:5), and two probes that hybridize to the tandem repeats. The nucleotide sequences in the figure indicate the anchor probe (top; SEQ ID NO:2), the tandem repeats of genomic DNA (middle), and the mutation probe (bottom; SEQ ID NO:1). The sequences of the repeat units are in italics. Each repeat unit is separated by a space. All sequences are shown as the sequence of

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the sense strand for easy verification of the sequences. In reality, either one of the genomic DNA and each probe is an antisense sequence.

Please replace the paragraph beginning at page 16, line 5 with the following amended paragraph:

 Sequences of PCR Primer FW, PCR Primer REV, Hybridization Probe (Anchor), and Hybridization Probe (Mutation):

PCR Forward Primer Sequence 5'-GTG GCT CCT GCG TTT CCC C-3' (SEQ ID NO:3)

PCR Reverse Primer Sequence 5'-TCC GAG CCG GCC ACA GGC AT-3' (SEQ ID NO:4)

Hybridization probe (Anchor) Sequence 5'-CGC GGA AGG GGT CCT GCC ACC GCG CCA CTT GGC CTG CCT CGG TCC CGC CG-FITC-3' (SEQ ID NO:2)

Hybridization probe (Mutation) Sequence 5'-LCRed640-CTT GGC CTG CCT CCG TCC CGC CGC CGC-phosphorylation-3' (SEQ ID NO:1)